

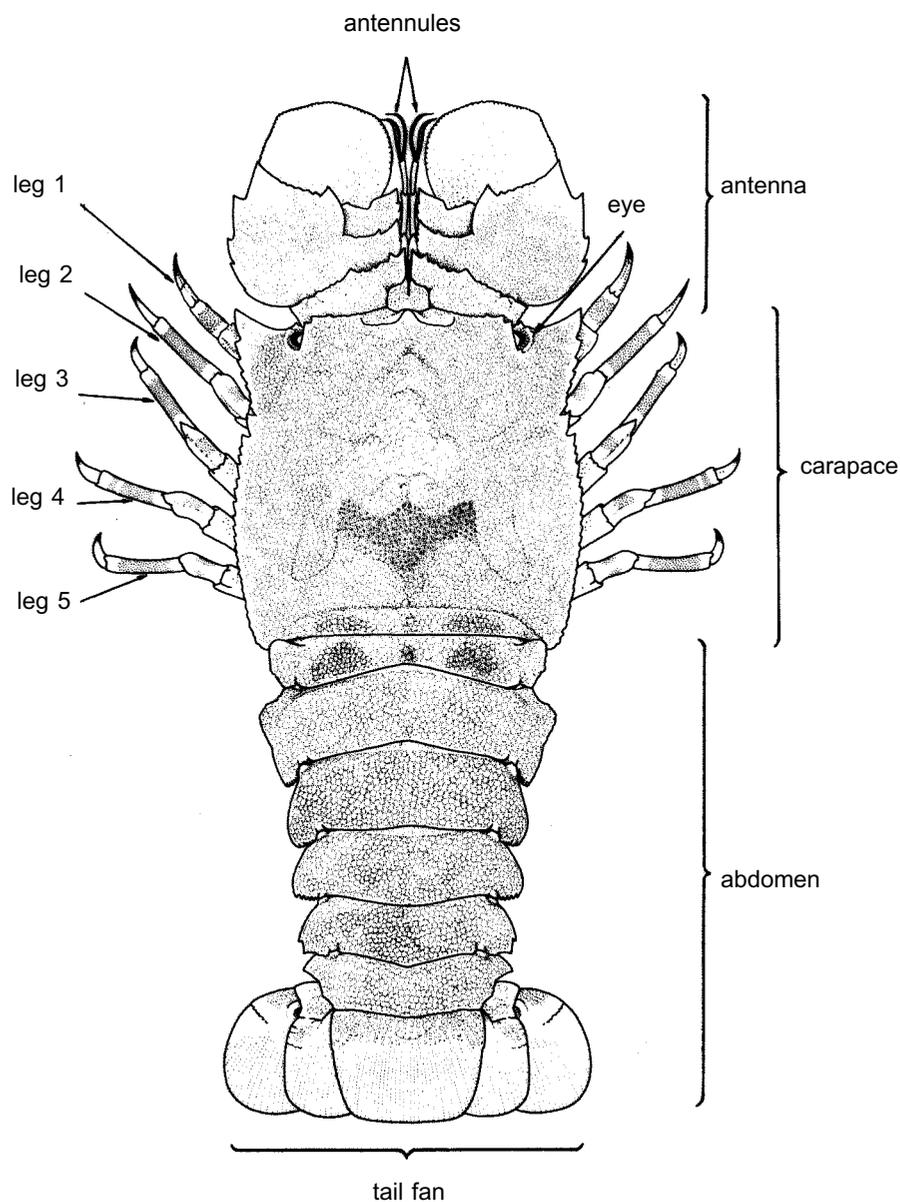
FAO SPECIES IDENTIFICATION SHEETS

FISHING AREA 51
(W. Indian Ocean)

SCYLLARIDAE

Slipper lobsters

Small to large crustaceans (total length between 2 and 40 cm). Body more distinctly flattened than in any other group of lobsters. Carapace usually granular, sometimes with teeth, spines and ridges; eyes movable but recessed into anterior margin of carapace. Antennae short and broad, plate-like, lacking flagella; antennules short and slender, with 2 short flagella. Tail broad and powerful, with a well developed tail fan. All legs without pincers (except the fifth leg of the female which in most species ends in a small pincer); all legs of about same size.



Colour: usually drab, brownish in various shades; central part of first abdominal segment often with a characteristic pattern of brightly coloured large spots.

This family comprises 5 genera and 18 species in Fishing Area 51, ranging in size from 2 to 40 cm in total length, and occurring from the coastline to at least 330 m depth. All slipper lobsters are benthic species, many of them occurring on level bottoms (sand, mud or rock) but some preferring reef areas. An established fishery exists for one of the Western Indian Ocean species, viz., Thenus orientalis. Some of the species - especially the larger Scyllarides - are fished locally or caught incidental to other fishing operations, and may be sporadically seen in local markets.

SIMILAR FAMILIES OCCURRING IN THE AREA:

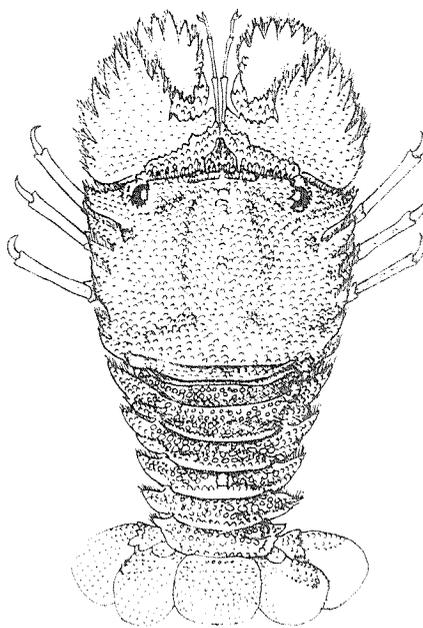
No other family of lobsters has such a flattened body or plate-like antennae without flagella.

KEY TO GENERA OCCURRING IN THE AREA:

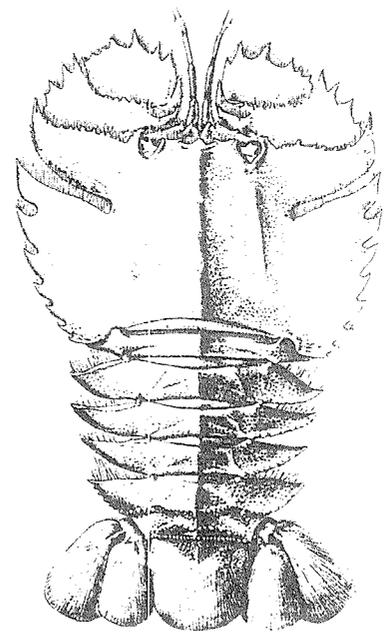
- 1a. Eyes placed at the anterolateral corners of carapace; carapace flat, triangular, narrowing posteriorly; posterior lateral margin without teeth (Fig.1)..... Thenus
- 1b. Eyes placed on the anterior margin of carapace at considerable distance from the anterolateral corners; carapace quadrangular, not strongly narrowing posteriorly
 - 2a. Carapace much wider than long, its sides thin; lateral margin of carapace with a very deep incision (occupying about 1/4 of the carapace width) in the anterior part; behind this incision the margin is dentate
 - 3a. Body covered rather uniformly with high granules and short stiff erect hairs, giving the animal a rough, hairy appearance; distance between the eyes much larger than that between each eye and the closest anterolateral angle (Fig.2) Parribacus
 - 3b. Body smooth or with low rounded tubercles, naked or with inconspicuous appressed hairs, giving the impression of a naked smooth animal; distance between the 2 eyes shorter than that between each eye and the nearest anterolateral angle of carapace (Fig.3) Ibacus



Thenus Fig.1



Parribacus Fig.2



Ibacus Fig.3

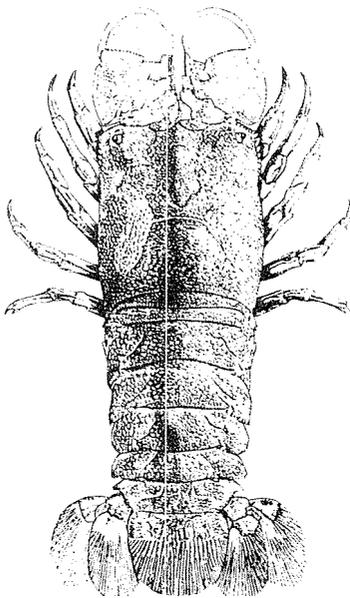
2b. Carapace as long as or longer than broad, its sides broadly rounded, not thin; lateral margin in the anterior part with at most a shallow inconspicuous indentation; teeth on lateral margin of carapace small or practically absent

4a. Large lobsters (up to 40 cm total length); first segment of abdomen smooth, without transverse groove; surface of following segments uniformly granulated, without sculpturation; distal margin of last segment of antenna finely crenulated (Fig.4) Scyllarides

4b. Medium- or small-sized lobsters (total length always less than 20 cm); first segment of abdomen usually with distinct transverse groove; last segment of antenna with few large or many small teeth; abdominal segments with transverse grooves or arborescent markings

5a. Medium-sized lobsters (adults more than 12 cm total length); margin of distal segment of antenna with numerous (more than 20) small teeth; abdominal segments with elevated crenulated areas separated by hairy wide grooves Arctides

5b. Small-sized lobsters (adults less than 10 cm in total length); margin of distal segment of antenna with few (less than 10) distinct wide teeth; abdominal segments either with a transverse groove or with arborescent narrow grooves, without elevated crenulated structures (Fig.5) Scyllarus



Scyllarides Fig.4



Scyllarus Fig.5

LIST OF SPECIES OCCURRING IN THE AREA:

Code numbers are given for those species for which Identification Sheets are included

Arctides regalis Holthuis, 1963

Ibacus novemdentatus Gibbes, 1850

SCYLL Ib 1

Parribacus antarcticus (Lund, 1793)

SCYLL Par 1

Scyllarides elizabethae (Ortmann, 1894)

SCYLL Scyld 5

Scyllarides haanii (De Haan, 1841)

Scyllarides squamosis (H. Milne Edwards, 1837)

SCYLL Scyld 6

Scyllarides tridaenophaga Holthuis, 1967

<u>Scyllarus</u> <u>batei</u> Holthuis, 1946	SCYLL Scylr 2
<u>Scyllarus</u> <u>cultrifer</u> meridionalis Holthuis, 1960	
<u>Scyllarus</u> <u>gibberosus</u> (De Man, 1905)	
<u>Scyllarus</u> <u>lewinsohni</u> Holthuis, 1967	
<u>Scyllarus</u> <u>martensii</u> Pfeffer, 1881	
<u>Scyllarus</u> <u>ornatus</u> Holthuis, 1960	
<u>Scyllarus</u> <u>pumilus</u> Nobili, 1905	
<u>Scyllarus</u> <u>rubens</u> Alcock & Anderson, 1894	
<u>Scyllarus</u> <u>rugosus</u> H. Milne Edwards, 1837	
<u>Scyllarus</u> <u>sordidus</u> (Stimpson, 1860)	
<u>Thenus</u> <u>orientalis</u> (Lund, 1793)	SCYLL Then 1

Prepared by L.B.Holthus, Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands. Partly based on Species Identification Sheets for the Western Central Atlantic (Fishing Area 31) prepared by R.B. Manning, Department of Invertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Washington D.C. 20560, USA

FAO SPECIES IDENTIFICATION SHEETS

FAMILY: SCYLLARIDAE

FISHING AREA 51
(W. Indian Ocean)*Ibacus novemdentatus* Gibbes, 1850

OTHER SCIENTIFIC NAMES STILL IN USE: None

VERNACULAR NAMES:

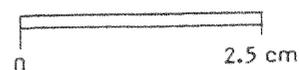
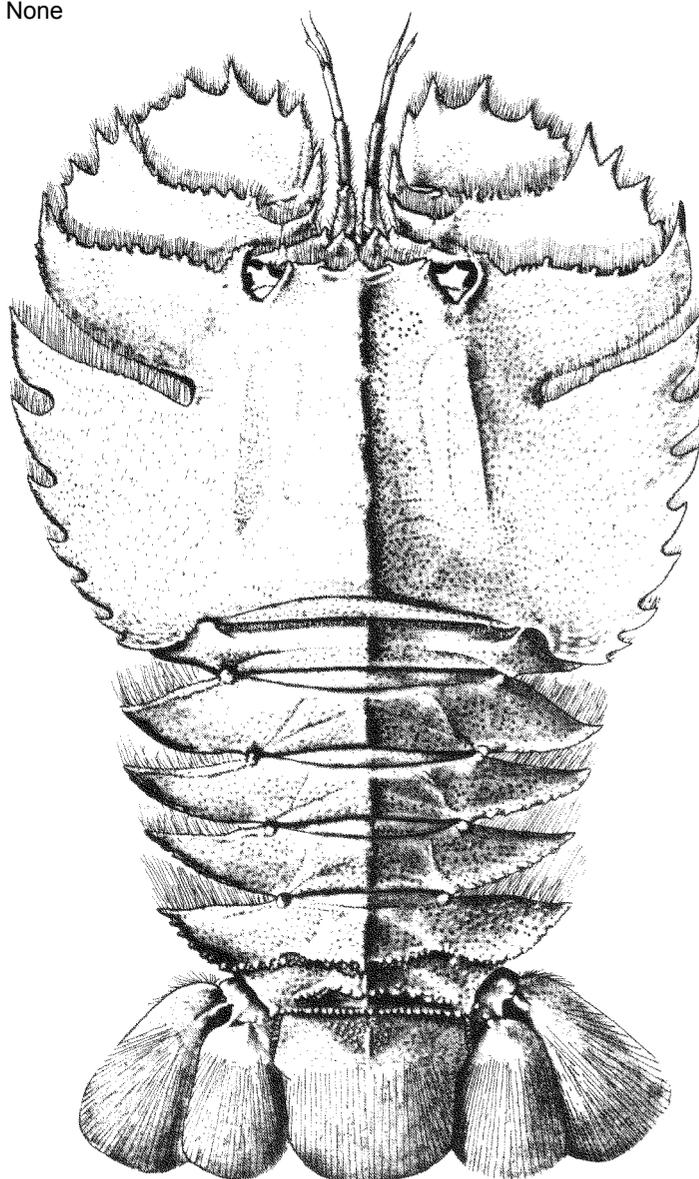
FAO : En - Smooth fan lobster
Fr - Cigale glabre
Sp - Cigarro liso

NATIONAL:

DISTINCTIVE CHARACTERS:

Body very strongly flattened, carapace broader than long, upper surface coarsely pitted, otherwise smooth, without tubercles. Orbits on anterior margin of carapace closer to median line of body than to anterolateral angles. Upper surface with two straight diverging ridges, starting somewhat behind each orbit. Lateral margins of carapace flattened, with a deep (more than 1/4 of width of carapace) incision (cervical incision in anterior part); behind this incision 7 or 8 distinct teeth; anterior margin of incision gradually merging into anterolateral tooth. Antennae broad, without flagella, the two large segments both with several distinct teeth. Antennules short and slender. Third maxilliped swollen and of a yellowish colour. Tail broad, powerful, with a well developed tailfan. All legs (except fifth leg of female) without pincers, none of them enlarged.

Colour: pale yellowish orange with scattered red stipples.



DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Other species of Scyllaridae: species of Arctides, Scyllarides, Scyllarus and Thenus do not show the deep cervical incision, they have at most a shallow cervical indentation there which occupies less than 1/10 of the width of the carapace. Parribacus has the dorsal surface of the body covered with numerous small tubercles and stiff short hairs. Thenus has the carapace strongly narrowing posteriorly, and the eyes are placed at the anterolateral angles of the carapace.

SIZE:

Maximum: 16.5 cm total length (male), 18.5 cm (female); maximum carapace length 7 cm (male), 8 cm (female).

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Within the area, known from East Africa (Kenya to Natal). Elsewhere recorded from the Mascarene Ridge banks, Viet Nam, South China Sea, Taiwan Island, Korea and Japan.

Occurs at depths between 40 and 360 m on a substrate of fine sediments (fine sand, muddy sand, sandy mud, etc.).

PRESENT FISHING GROUNDS:

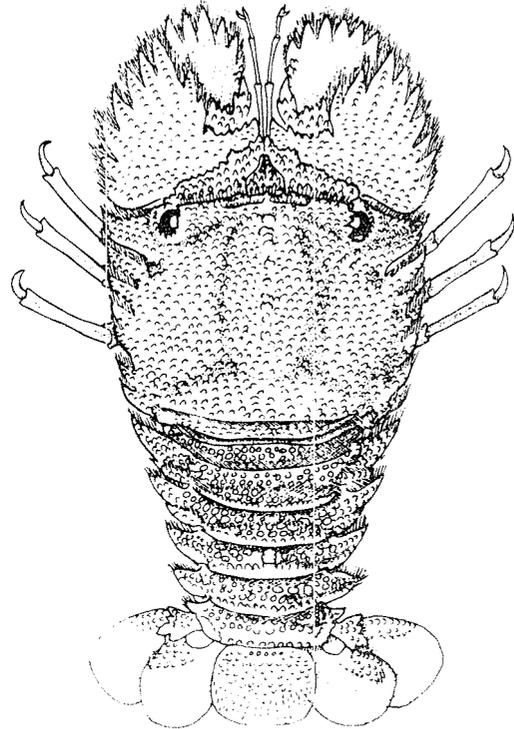
There is no organized fishery at present; although the species has, at one occasion at least, been found on a local market (at Pusan, see Kim, 1973, Illustr. Encycl. Fauna Flora Korea, 14:336-400). Ivanov & Krylov (1980, Crustaceana, 38(3):287) mentioned the species to be very common in trawl catches made on the East African continental shelf: the numbers obtained were sometimes as high as 22.6 kg/h.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

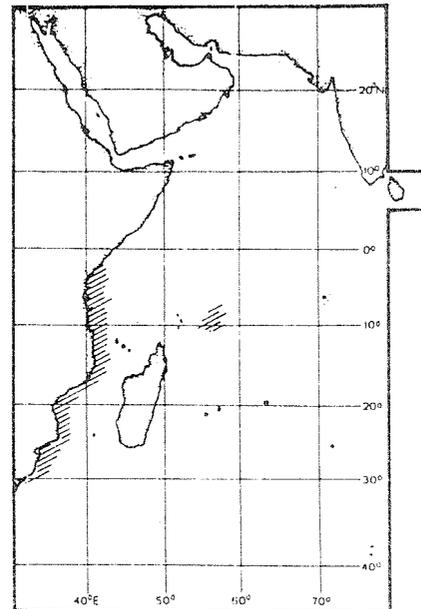
Separate statistics are not reported for this species.

It is mostly taken by trawlers as an admixture to the main catch.

Marketed fresh locally.



Parribacus
(dorsal view)



FAO SPECIES IDENTIFICATION SHEETS

FAMILY: SCYLLARIDAE

FISHING AREA 51
(W. Indian Ocean)Parribacus antarcticus (Lund, 1793)OTHER SCIENTIFIC NAMES STILL IN USE : Parribacus ursusmajor (Herbst, 1793)

VERNACULAR NAMES:

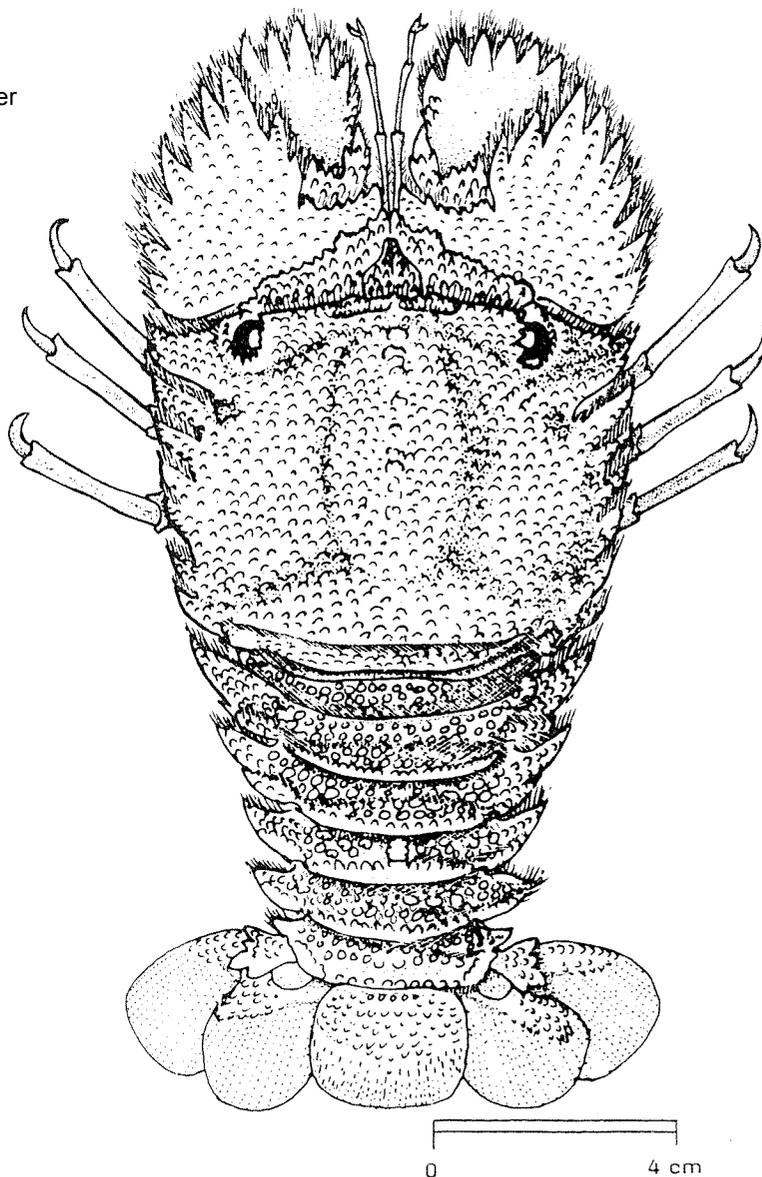
FAO : En - Sculptured slipper lobster
Fr - Cigale savate
Sp - Cigarro chino

NATIONAL:

DISTINCTIVE CHARACTERS:

Body very strongly flattened, with pebblelike and scalelike sculpture on surface. Carapace broader than long, its sides very thin and cut into large flattened, toothlike, triangular projections. Antennae short and broad, scalelike, lacking flagella, their anterior margins cut into moderately large teeth; antennules short and slender. Tail broad, powerful, with a well developed fan. All legs (except fifth leg of female) without pincers, none of them enlarged.

Colour: dorsal surface tan, mottled with brown and red, but without enlarged red spots on first abdominal segment.



DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

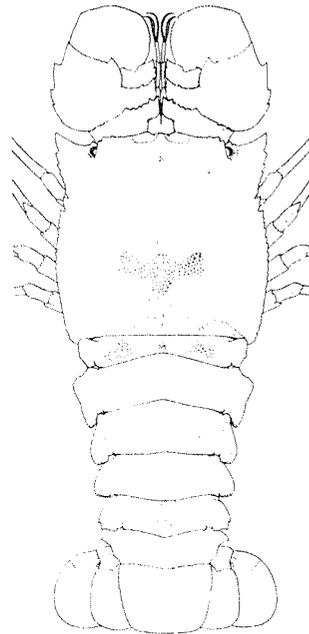
Ibacus novemdentatus: surface of carapace smooth, but pitted, without tubercles; number of teeth on the antennal segments smaller.

Thenus orientalis: no teeth on posterior half of carapace; eyes placed at anterolateral angles of carapace.

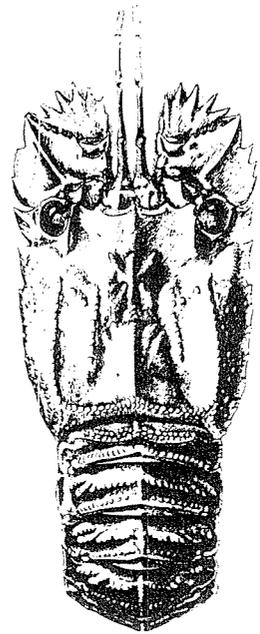
Scyllarus and Scyllarides species: carapace usually longer than broad and less flattened, its sides not very thin and either smooth or denticulate (but without large, triangular projections). In addition, adults of Scyllarides species are much larger, with lateral margins of carapace and anterior margins of antennae smooth or nearly so, and the first abdominal segments are marked with conspicuous large red spots; adults of Scyllarus species are much smaller and have a raised, irregular ridge on midline of carapace.

SIZE:

Maximum: about 20 cm total length.



Scyllarides elisabethae



Scyllarus batei

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Within the area, reported from Kenya and Tanzania, Durban (South Africa), Réunion, Mauritius, Chagos Archipelago and Sri Lanka. Also present in the Eastern Indian Ocean, the Western Central Pacific and the Western Central Atlantic.

Habits not well known, the species apparently not being very abundant; reported to live in water deeper than 10 m.

PRESENT FISHING GROUNDS:

There is no organized fishery at present; like the species of Scyllarides, it is probably caught incidental to fisheries for spiny lobsters.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly by hand, with dipnets, spears, or with traps, often taken when torch fishing.

Used for private consumption, or marketed locally.

